

IN THE CLAIMS:

The following listing of the claims replaces all prior versions and listings.

1. (Previously presented) A tire provided with a capacitive sensor comprising at least a pair of substantially parallel electrodes, the capacitive sensor being located on a sidewall of the tire, wherein the electrodes lie substantially in a plane perpendicular to the rotation axis of the tire and are substantially orientated in an ortho-radial direction.
2. (Previously presented) The tire of Claim 1, wherein the electrodes are filamentary electrodes.
3. (Previously presented) The tire of Claim 2, wherein the electrodes are filaments of conductive rubber.
4. (Previously presented) The tire of Claim 1, wherein the electrodes are strip electrodes.
5. (Previously presented) The tire of Claim 1, wherein the electrodes are rectilinear.
6. (Previously presented) The tire of Claim 1, wherein the electrodes are arcs of circles substantially concentric with the rotation axis of the tire.

7. (Previously presented) The tire of Claim 1, wherein the electrodes are embedded in an elastomeric body configured so as to facilitate displacement of one of the electrodes relative to the other.

8. (Previously presented) The tire of Claim 7, wherein the elastomeric body comprises a slot between the electrodes.

9. (Previously presented) The tire of Claim 1, wherein the sensor comprises a flexible conductive envelope connected to a fixed potential so as to limit electromagnetic interference.

10. (Previously presented) The tire of Claim 9, wherein the conductive envelope comprises conductive particles embedded in the elastomeric body, the conductive particles comprising at least one of carbon black and metallic particles.

11. (Previously presented) The tire of Claim 1, wherein the sensor is located on a part of the sidewall of the tire between a bottom zone and a zone of maximum flexure.

12. (Previously presented) A deformation sensor comprising at least a pair of substantially parallel electrodes embedded in an elastomeric body forming a dielectric, wherein the sensor is adapted to be placed on a surface of a tire and is configured to facilitate displacement of one of the electrodes relative to the other and comprises a flexible conductive envelope connected to a fixed potential so as to limit electromagnetic interference.

13. (Previously presented) The deformation sensor of Claim 12, wherein the conductive envelope comprises conductive particles embedded in the elastomeric body, the conductive particles comprising at least one of carbon black and metallic particles.

14. (Previously presented) The deformation sensor of Claim 12, wherein the elastomeric body has a slot between the electrodes.

15. (Currently amended) A method for evaluating the deflection of a tire, wherein the local bending of part of the sidewall of the tire in a plane containing the axis of the tire is measured with the deformation sensor according to claim 12, 13 or 14.

16. (Previously presented) The method for evaluating the deflection of Claim 15, wherein the part of the sidewall of the tire where local bending is measured is located between a bottom zone and a zone of maximum flexure.

17. (Previously presented) The method for evaluating the deflection of a tire of Claim 15, wherein the pressure of the tire is also measured.